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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/566,899	09/25/2006	Che-Hung Robert Lee	NIH275.001NP	9600
36218 7590 11/24/2009 KLARQUIST SPARKMAN, LLP 121 S.W. SALMON STREET			EXAMINER	
			SWARTZ, RODNEY P	
SUITE #1600 PORTLAND, OR 97204-2988			ART UNIT	PAPER NUMBER
			1645	
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			11/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/566,899 LEE ET AL. Office Action Summary Examiner Art Unit Rodney P. Swartz, Ph.D. 1645 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 28 July 2009. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-8 and 19-22 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 19.20.22 is/are allowed. 6) Claim(s) 1-8 is/are rejected. 7) Claim(s) 21 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 1February2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)
Notice of Draftsperson's Patent Drawing Review (PTO-948)
Notice of Draftsperson's Patent Drawing Review (PTO-948)

Paper No(s)/Mail Date 9/1/06,1/30/08,4/15/08.

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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### DETAILED ACTION

 Applicants' Response to Restriction Requirement, received 28 July 2009, is acknowledged. Applicants elect, without traverse, Invention I, claims 1-8 and 19-22, drawn to first vaccine construct and method of making.

Claims 9-18 and 23-32 have been cancelled.

2. Claims 1-8 and 19-22 are pending and under consideration.

## Specification

The disclosure is objected to because of the following informalities:

Paragraph 0011, line 5, the cited reference (Frasch et al) is incomplete

Appropriate correction is required.

# Claim Objections

 Claim 21 is objected to because of the following informality: "Pneumococcus" should be in italics. Appropriate correction is required.

### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

 Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention

In claim 1:

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step 2 is buffer exchanging the solution of the polysaccharide to a pH of from about 7  $\,$ 

to about 8.

Step 4 is raising a pH of the solution of protein to from about 6 to about 7.

Step 5 is raising the protein solution pH to from about 7 to about 11.

Step 6 is buffer exchanging the solution of the protein to a pH of from about 10 to about

11.

Step 7 is reacting the protein solution with the polysaccharide solution at a pH of from

about 6 to about 8.

Since the pH of the final protein solution (step 5) is from about 7 to about 11, and the pH of the

final polysaccharide solution (step 2) is from about 10 to about 11, it is unclear how one reacts

the polysaccharide with the protein at a pH of from about 6 to about 8, without alteration of the

pH of the final polysaccharide solution, pH 7-8, and the final protein solution, pH 10-11.

Claims 2-8 depend from claim 1, but do not clarify the issue.

6. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

Claim 1, line 16, recites "reducing substantially all" of bonds. The specification does not

define the metes and bounds of what constitutes "substantially all" bonds and therefore the

claim is unclear as to how many of the bonds are to be reduced and satisfy the claimed

invention.

Claims 2-8 depend from claim 1, but do not clarify the issue.

Conclusion

7. Claims 1-8 are rejected. Claim 21 is objected to.

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 Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rodney P. Swartz, Ph.D., Art Unit 1645, whose telephone number is (571)

272-0865. The examiner can normally be reached on Monday through Wednesday from  $9 \mathbin{:} 00$ 

AM to 7:30 PM EST. Thursday is the examiner's work at home day.

If attempts to reach the Examiner by telephone are unsuccessful, please contact the Examiner's Supervisor, Robert B. Mondesi (571)272-0956.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="https://pair-direct.uspto.gov">https://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Rodney P. Swartz, Ph.D./ Primary Examiner, Art Unit 1645

November 24, 2009